



INNOVATIONS CATEGORY:  
Infrastructure Development  
Recognizing Value in Transaction Process

INNOVATOR:  
BARA

## Valuing Green in the Appraisal Process

The Appraisal Institute now has agreements in place with several home certification organizations to use rater information to auto-generate a Green and Energy Efficiency Addendum to the appraisal that could help more accurately value energy-efficiency improvements for thousands of homes on the market. RESNET raters evaluated 120,000 homes in 2013 and are expected to rate more than 200,000 homes in 2014.



### BUILDING AMERICA TOP INNOVATIONS

**Recognizing Top Innovations in Building Science**

The U.S. Department of Energy's Building America program was started in 1995 to provide research and development to the residential new construction and remodeling industry. As a national center for world-class research, Building America funds integrated research in market-ready technology solutions through collaborative partnerships between building and remodeling industry leaders, nationally recognized building scientists, and the national laboratories. Building America Top Innovation Awards recognize those projects that have had a profound or transforming impact on the new and retrofit housing industries on the road to high-performance homes.

*Building America's BARA team facilitated discussions between the Appraisal Institute and RESNET, paving the way for a groundbreaking agreement between the two organizations that allows RESNET-approved Home Energy Rating System (HERS) software to auto-generate a fact-filled Green and Energy Efficiency Addendum intended for real estate appraisers for every home rated by a RESNET-certified HERS rater.*

Real estate appraisers have historically faced challenges with green and energy-efficient homes, both in identifying comparables and in supporting adjustments for improvements. These difficulties have stemmed from many reasons, including data gaps in commonly used information systems and lender guidelines that look skeptically upon the use of income or cost approaches to value. The housing industry believes this makes it more difficult to build green and energy-efficient homes.


Starting in 2010, the U.S. Department of Energy's Building America program formed an implementation committee with the Building America Research Alliance (BARA) team serving as chair. The goal of this committee was to better understand the real estate transaction process, including selling, appraising, financing, and insuring homes, and to help transform these processes to effectively consider the value of energy efficiency.

In 2011, BARA brought together Building America participants, including builders, raters, and other stakeholders, to identify the top barriers to implementation of Building America technical innovations. Consistently, participants pointed to the appraisal processes employed by the U.S. mortgage lending industry as one aspect of the real estate transaction process that impeded implementation of technical innovations.

In 2012, BARA invited members of the appraisal community to a Building America Stakeholder Meeting where participants outlined the current appraisal process, detailed efforts underway in the profession to improve the valuation process, and identified areas where Building America could have a significant transformative contribution.

A key focus of the session was on identifying existing appraisal tools that could be modified to quickly improve the consistent valuation of energy efficiency. One tool identified was the Appraisal Institute's Green and Energy Efficiency Addendum

*(top left) The Green Addendum helps appraisers to consistently and adequately value above-code energy-efficiency improvements in new home construction and remodels. Photo courtesy of BARA.*

	Client File #:	Appraisal File #:
	<b>Residential Green and Energy Efficient Addendum</b>	
	Client:	
	Subject Property:	
	City:	State:

The Green Addendum portion of the Appraisal Institute’s appraisal form can now be automatically generated from the RESNET rater’s report to provide appraisers with important information for market research.

(Form 820.04), which had been developed by the Appraisal Institute in 2011 as a supplement to the standard industry appraisal form adopted by Fannie Mae, Freddie Mac, and the Federal Housing Administration. Although the Green and Energy Efficiency Addendum was available to most appraisers, it was rarely used or recognized if used by market participants.

Participants in the session agreed that, if this tool could be modified to include third-party-substantiated data, it would assist appraisers in market research. BARA conducted a subsequent evaluation of the Green Addendum, along with stakeholder engagement activities with the Appraisal Institute, RESNET, Elevate Energy (formerly CNT Energy), and others.

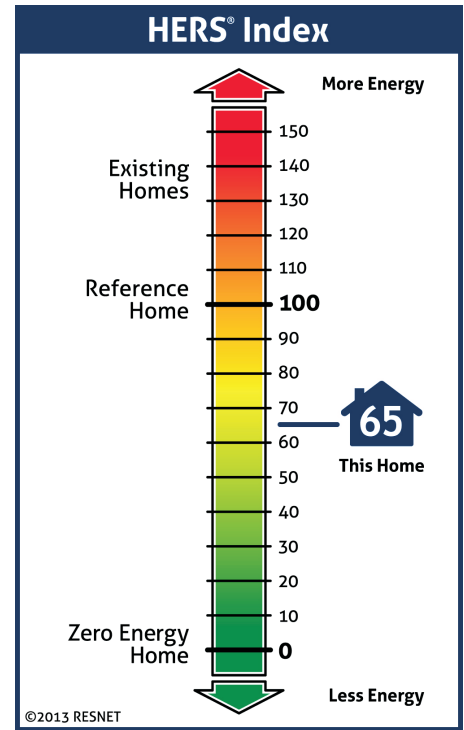
Based on the results of this evaluation, BARA recommended that the Green and Energy Efficiency Addendum be auto-populated with data from third-party home energy raters and verifiers. This would provide better substantiation for appraisers to use when valuing energy-efficiency features, increase the number of Addendums created for homes during the appraisal process, increase consumer awareness of energy-efficiency features, and increase demand for appraisers knowledgeable in energy efficiency.

Through its work with stakeholders and its role in the Building America “Transaction Process Summit,” BARA determined there was a simple barrier keeping this integration between the rating industry and the Appraisal Institute from happening—no one had asked for it.

In 2013, BARA facilitated discussions between the Appraisal Institute and RESNET, and paved the way for a groundbreaking agreement between the two organizations, allowing RESNET-approved HERS software to auto-generate the Green and Energy Efficiency Addendum for every home rated by a RESNET-certified rater. This information may be provided to a real estate appraiser and can be useful in market research and identification of comparable properties.

RESNET-certified raters evaluated 120,000 homes in 2013 and are expected to rate more than 200,000 homes in 2014. Moving forward, all homes that are appraised have the potential to get an auto-generated Green and Energy Efficiency Addendum.

The agreement between the Appraisal Institute and RESNET was used as a model for other auto-population agreements with building certification organizations, such as an agreement signed in November 2014 between the Appraisal Institute and the Home Innovation Research Laboratories.



The Home Energy Rating System (HERS) score, which is generated by the RESNET rater, is one piece of information included in the Green Addendum.

“RESNET’s work with [BARA] over the past months has helped us pave the way to create a direct connection between homes that are rated by our HERS raters and the appraisal industry. Because of Building America’s efforts to remove barriers to the adoption of high-performance homes in the appraisal industry, we’ll be able to auto-generate a green addendum containing extensive energy-efficiency information for more than 120,000 new homes each year.”

– Steve Baden, Executive Director, RESNET